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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/817,615	03/26/2001	Khoi A. Phan	F0658	6873

7590 10/18/2005

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EXAMINER

FRANKLIN, JAMARA ALZAIDA

ART UNIT	PAPER NUMBER
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2876

DATE MAILED: 10/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/817,615

Applicant(s)

PHAN ET AL.

Examiner

Jamara A. Franklin

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 August 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 and 16-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 28-31 is/are allowed.
- 6) ☒ Claim(s) 1-14 and 32-34 is/are rejected.
- 7) ☒ Claim(s) 16-27 and 35 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Acknowledgment is made of the amendment filed on 8/31/05. Claims 1-14 and 16-36 are currently pending.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. Limitations citing “the third barcodes” as worded in independent claim 1, and therefore dependent claims 2-13, are vague and indefinite since there is no prior discussion of “third barcodes” in the independent claim. For examination purposes, the limitations of claim 1 will be interpreted as trying to define marking an integrated circuit fabricated from the wafer with one or more third barcodes, the third barcodes encoding information sufficient to identify the wafer from which the packaged integrated circuit was fabricated by relating the third barcodes to at least one of the first barcode, the wafer information stored in the data store, the one or more second barcodes and packaging information related to the packaging of the integrated circuit.

Appropriate correction and clarification is required.

Claim Objections

4. Claims 16, 27, 35, and 36 are objected to because of the following informalities:
- in claim 16, lines 9-10, delete “one or more”;
 - in claim 16, line 10, substitute “barcodes” with --barcode--;
 - in claim 27, line 10, substitute “barcodes” with --barcode--;
 - in claim 27, lines 10-11, delete “one or more”;
 - in claim 27, line 11, substitute “barcodes” with --barcode--;
 - in claim 35, line 5, substitute “at least one other” with --a third--;
 - in claim 35, line 8, delete “one or more” and substitute “barcodes” with --barcode--;
 - in claim 36, line 7, substitute the second occurrence of “the” with --a--;
 - in claim 36, line 8, substitute the first occurrence of “the” with --a--; and
 - in claim 36, line 8, substitute “and/or” with --or--.
- Appropriate correction is required.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 14, 32-34, and 36 are rejected under 35 U.S.C. 102(e) as being anticipated by Davis (US 6,061,605).

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Davis teaches a system and method for performing inventory control comprising:

one or more inventories (cassette 19) adapted to store at least one of wafers (wafer 18), unpackaged circuits and packaged circuits, where the wafers are suitable for processing into integrated circuits and where at least one of the wafers, the unpackaged circuits and the packaged circuits are marked with one or more barcodes (col. 8, lines 5-9);

the inventories wherein at least one of the one or more inventories is partitioned into one or more addressable locations (see figure 1);

one or more barcode readers operable to read one or more barcodes on the wafers, unpackaged circuits and packaged circuits (col. 8, lines 27-29);

one or more manufacturing devices (treatment modules including heating module 70 and cooling module 72) adapted to perform one or more manufacturing processes on the wafers, unpackaged circuits and packaged circuits (col. 9, lines 4-31);

one or more sorters (robot controller 58) adapted to route at least one of wafers, unpackaged circuits and packaged circuits to at least one of the one or more inventories and the one or more manufacturing devices based, at least in part, on information encoded by the one or more barcodes (col. 8, lines 61-67);

one or more transporters (robot 50) adapted to move one or more wafers, unpackaged circuits and packaged circuits between the one or more inventories, the one or more barcode readers and the one or more sorters (col. 8, lines 61-67);

one or more feedback systems (support equipment manager server 136) adapted to receive feedback information from at least one of the one or more barcode readers, the one or more sorters and the one or more manufacturing devices, the one or more feedback systems

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adapted to generate control information that is fed forward to at least one of the one or more barcode readers, the one or more sorters and the one or more manufacturing devices (col. 8, lines 42-52);

wherein the feedback information includes at least one of: the processing capacity of a feedback generator, the status of the feedback generator, processing time or cost associated with the feedback generator, scheduled maintenance time for the feedback generator, defect rate of the feedback generator and defect rate of a wafer handled by the feedback generator;

one or more Electronic Data Interchange (EDI) systems (host controller 20) adapted to transmit one or more EDI data to one or more EDI data destinations, the one or more EDI data being generated by at least one of the one or more barcode readers, the one or more inventories, the one or more sorters, the one or more manufacturing devices and the one or more feedback systems (col. 7, line 58-col. 8, line 4);

the one or more EDI data including at least one of ordering information, defect information and delivery information (col. 8, lines 27-32);

the method wherein the wafer is suitable for processing into integrated circuits (col. 1, line 64-col. 2, line 9);

identifying a wafer store from which to retrieve a wafer (col. 8, lines 5-9);

identifying a wafer to retrieve from a wafer store (col. 8, lines 52-61);

moving the wafer from the wafer store to a barcode reader (col. 8, lines 5-32);

identifying a wafer store to which to route a wafer (col. 8, lines 27-29);

identifying a wafer to route to the wafer store (col. 8, lines 27-29); and

moving the wafer to the wafer store (col. 8, lines 61-67);

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accessing stored data associated with information encoded on a barcode on a wafer (col. 8, lines 22-32); and

controlling one or more behaviors of one or more wafer destinations based at least in part on accessing the stored data (col. 8, lines 42-48);

the method wherein the stored data includes at least one of wafer age, wafer location, wafer manufacturer, stage of wafer processing completed, next stage of wafer processing to be performed and wafer defects (col. 8, lines 11-21); and

a data packet adapted to be transmitted between two or more computer processes, the data packet containing information or feedback information related to inventory control and routing data encoded in one or more barcodes on a wafer, the wafer suitable for processing into integrated circuits (col. 8, line 5-col. 9, line 9).

Allowable Subject Matter

7. Claims 1-13 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

8. Claims 16-27 and 35 are allowable over prior art.

9. Claims 28-31 are allowed.

10. The following is a statement of reasons for the indication of allowable subject matter: although the prior art of record, particularly the Davis invention, teach identifying a wafer using

a bar code, the prior art lacks the teaching of a method of tracking integrated circuits comprising: marking a packaged integrated circuit fabricated from the wafer with one or more third barcodes, the third barcodes encoding information sufficient to identify the wafer from which the packaged integrated circuit was fabricated by relating the third barcodes to at least one of the first barcode, the wafer information stored in the data store, the one or more second barcodes and packaging information related to the packaging of the integrated circuit.

Response to Arguments

11. Applicant's arguments filed 8/31/05 have been fully considered but they are not persuasive.

In response to the argument that Davis lacks the teaching of **suppliers of the wafers**, the examiner submits that the terms suppliers of the wafers has been broadly interpreted to represent anything, anyone, or any place that may supply wafers or from which wafers come, thereby making the anything, anyone, or any place “suppliers” of the wafers. In this case, the suppliers of the wafers is an inventory, sorter (robot controller 58), manufacturing device (treatment modules including heating module 70 and cooling module 72), or robot 50 as taught by Davis.

In response to the argument Davis fails to teach limitations found in claim 36 that cite one or more feedback systems adapted to received feedback information from at least one of the one or more barcode readers, the one or more sorters and the one or more manufacturing devices, the one or more feedback systems adapted to generate control information that is fed forward to at least one of the one or more barcode readers, the one or more sorters and the one or more manufacturing devices, the examiner submits that control information is generated by the host

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controller which sends (i.e. feeds) a signal (i.e. control information) to the robot controller 58 to scan the cassette of wafers (col. 8, lines 49-52).

Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jamara A. Franklin whose telephone number is (571) 272-2389. The examiner can normally be reached on Monday through Friday 8:00am to 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on (571) 272-2398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jamar A. Franklin
Examiner
Art Unit 2876

JAF
October 7, 2005



THIEN M. LE
PRIMARY EXAMINER